



387	ATA	AAT	GGT	ATC	AAA	GAT	GCA	AGG	AAG	GTC	ACT	GTA	GGT	GTG	ATT	GGA	AGT	GGA	432
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
---	I	N	G	I	K	D	A	R	K	V	T	V	G	V	I	G	S	G	---
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
441	GAT	TTT	GCC	AAA	TCC	TTG	ACC	ATT	CGA	CTT	ATT	AGA	TGC	GGC	TAT	CAT	GTG	GTC	486
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
---	D	F	A	K	S	L	T	I	R	L	I	R	C	G	Y	H	V	V	---
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
495	ATA	GGA	AGT	AGA	AAT	CCT	AAG	TTT	GCT	TCT	GAA	TTT	TTT	CCT	CAT	GTG	GTA	GAT	540
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
---	I	G	S	R	N	P	K	F	A	S	E	F	F	P	H	V	V	D	---
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
549	GTC	ACT	CAT	CAT	GAA	GAT	GCT	CTC	ACA	AAA	ACA	AAT	ATA	ATA	TTT	GTT	GCT	ATA	594
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
---	V	T	H	H	E	D	A	L	T	K	T	N	I	I	F	V	A	I	---
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
603	CAC	AGA	GAA	CAT	TAT	ACC	TCC	CTG	TGG	GAC	CTG	AGA	CAT	CTG	CTT	GTG	GGT	AAA	648
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
---	H	R	E	H	Y	T	S	L	W	D	L	R	H	L	L	V	G	K	---

FIGURE 1B

657	ATC	CTG	ATT	GAT	GTG	AGC	AAT	AAC	ATG	AGG	ATA	AAC	CAG	TAC	CCA	GAA	TCC	AAT	702
	I	L	I	D	V	S	N	N	M	R	I	N	Q	Y	P	E	S	N	
711	GCT	GAA	TAT	TTG	GCT	TCA	TTA	TTC	CCA	GAT	TCT	TTG	ATT	GTC	AAA	GGA	TTT	AAT	756
	A	E	Y	L	A	S	L	F	P	D	S	L	I	V	K	G	F	N	
765	GTT	GTC	TCA	GCT	TGG	GCA	CTT	CAG	TTA	GGA	CCT	AAG	GAT	GCC	AGC	CGG	CAG	GTT	810
	V	S	A	W	A	L	Q	L	Q	L	G	P	K	D	A	S	R	Q	V
819	TAT	ATA	TGC	AGC	AAC	AAT	ATT	CAA	GCG	CGA	CAA	CAG	GTT	ATT	GAA	CTT	GCC	CGC	864
	Y	I	C	S	N	N	I	Q	A	R	Q	Q	V	I	E	L	A	R	
873	CAG	TTG	AAT	TTC	ATT	CCC	ATT	GAC	TTG	GGA	TCC	TTA	TCA	TCA	GCC	AGA	GAG	ATT	918
	Q	L	N	F	I	P	I	D	L	G	S	L	S	S	A	R	E	I	

FIGURE 1C

927	GAA	AAT	TTA	CCC	CTA	CGA	CTC	TTT	ACT	CTC	TGG	AGA	GGG	CCA	GTG	GTG	GTA	GCT	972
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	E	N	L	P	L	R	L	F	T	L	W	R	G	P	V	V	V	A	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
981	ATA	AGC	TTG	GCC	ACA	TTT	TTT	TTC	CTT	TAT	TCC	TTT	CTC	AGA	GAT	GTG	ATT	CAT	1026
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	I	S	L	A	T	F	F	F	L	Y	S	F	V	R	D	V	I	H	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1035	CCA	TAT	GCT	AGA	AAC	CAA	CAG	AGT	GAC	TTT	TAC	AAA	ATT	CCT	ATA	GAG	ATT	GTG	1080
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	P	Y	A	R	N	Q	Q	S	D	F	Y	K	I	P	I	E	I	V	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1089	AAT	AAA	ACC	TTA	CCT	ATA	GTT	GCC	ATT	ACT	TTG	CTC	TCC	CTA	GTA	TAC	CTC	GCA	1134
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	K	T	L	P	I	V	A	I	T	L	L	S	L	V	Y	L	A	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1143	GGT	CTT	CTG	GCA	GCT	GCT	TAT	CAA	CTT	TAT	TAC	GGC	ACC	AAG	TAT	AGG	AGA	TTT	1188
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	G	L	L	A	A	A	Y	Q	L	Y	Y	G	T	K	Y	R	R	F	

FIGURE 1D

1197	1206	1215	1224	1233	1242
CCA CCT TGG TTG GAA ACC TGG TTA CAG TGT AGA AAA CAG CTT GGA TTA CTA AGT					
P P W L E T W L Q C R K Q L G L L S					
1251	1260	1269	1278	1287	1296
TTT TTC TTC GCT ATG GTC CAT GTT GCC TAC AGC CTC TGC TTA CCG ATG AGA AGG					
F F F A M V H V A Y S L C L P M R R					
1305	1314	1323	1332	1341	1350
TCA GAG AGA TAT TTG TTT CTC AAC ATG GCT TAT CAG CAG GTT CAT GCA AAT ATT					
S E R Y L F L N M A Y Q Q V H A N I					
1359	1368	1377	1386	1395	1404
GAA AAC TCT TGG AAT GAG GAA GAA GTT TGG AGA ATT GAA ATG TAT ATC TCC TTT					
E N S W N E E E V W R I E M Y I S F					
1413	1422	1431	1440	1449	1458
GGC ATA ATG AGC CTT GGC TTA CTT TCC CTC CTG GCA GTC ACT TCT ATC CCT TCA					
G I M S L G L L S L L A V T S I P S					

FIGURE 1E

1467	GTG AGC AAT	1476	GCT TTA AAC	1485	TGG AGA GAA	1494	TTC AGT TTT	1503	ATT CAG TCT	1512	ACA CTT GGA
	---	---	---	---	---	---	---	---	---	---	---
	V S N	A L N	W R E	F S F	I Q S	T L G					
1521	TAT GTC GCT	1530	CTC ATA AGT	1539	ACT TTC	1548	GTT TTA ATT	1557	TAT GGA	1566	TGG AAA CGA
	---	---	---	---	---	---	---	---	---	---	---
	Y V A	L L I	S T F	H V L	I Y G	W K R					
1575	GCT TTT GAG	1584	GAG TAC	1593	TAT ACA CCA	1602	CAA AAC	1611	GTT CTT GCT	1620	GTT CTT GCT
	---	---	---	---	---	---	---	---	---	---	---
	A F E	E E Y	Y R F	Y T P	N F V	L A					
1629	CTT GTT TTG	1638	TCA ATT	1647	ATT CTG	1656	AAG ATT	1665	TTA TTC	1674	CTT CCA TGT
	---	---	---	---	---	---	---	---	---	---	---
	L V L	P S I	V I L	G K I	I L F	L P C					
1683	ATA AGC CGA	1692	CTA AAA	1701	CGA ATT	1710	GGC TGG	1719	AAG AGC	1728	CAA TTT CTG
	---	---	---	---	---	---	---	---	---	---	---
	I S R	K L K	R I K	K G W	E K S	Q F L					

FIGURE 1F

1737	GAA	GGT	ATT	GGA	GGA	ACA	ACA	ATT	CCT	CAT	GTC	TCC	CCG	GAG	AGG	GTC	ACA	GTA
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	E	E	G	I	G	G	T	I	P	H	V	S	P	E	R	V	T	V
	1791	TGA	TAA	ATG	GTG	TTC	ACA	GCT	GCC	ATA	TAA	AGT	TCT	ACT	CAT	GCC	ATT	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	M																	
	1845	TTT	ATG	ACT	TCT	ACG	TTC	AGT	TAC	AAG	TAT	GCT	GTC	AAA	TTA	TCG	TGG	GTT
	GA	3'																
	--																	

FIGURE 1G

1	MES	I	S	M	G	S	P	K	S	L	S	E	T	C	L	P	N	G	I	N	G	I	K	D	A	R	K	7492448			
1	MES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	K	g6572948			
31	V	T	V	G	V	I	G	S	G	D	F	A	K	S	L	T	I	R	L	I	R	C	G	Y	H	V	V	I	G	S	7492448
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	g6572948	
61	R	N	P	K	F	A	S	E	F	F	P	H	V	V	D	V	T	H	H	E	D	A	L	T	K	T	N	I	I	F	7492448
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	g6572948	
91	V	A	I	H	R	E	H	Y	T	S	L	W	D	L	R	H	L	L	V	G	K	I	L	I	D	V	S	N	N	M	7492448
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	g6572948	
121	R	I	N	Q	Y	P	E	S	N	A	E	Y	L	A	S	L	F	P	D	S	L	I	V	K	G	F	N	V	S	7492448	
23	E	E	D	D	Y	L	H	K	D	T	G	-	E	T	S	M	L	K	R	P	V	L	-	-	-	-	-	-	-	-	g6572948
151	A	W	A	L	Q	L	G	P	K	D	A	S	R	Q	V	Y	I	C	S	N	N	I	Q	A	R	Q	V	I	E	7492448	
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	g6572948	
181	L	A	R	Q	L	N	F	I	P	I	D	L	G	S	L	S	A	R	E	I	E	N	L	P	L	R	L	F	T	7492448	
67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	g6572948	
211	L	W	R	G	P	V	V	A	I	S	L	A	T	F	F	L	Y	S	F	V	R	D	V	I	H	P	Y	A	7492448		
70	Q	W	H	L	P	I	K	I	A	A	I	A	S	L	T	F	L	Y	T	L	R	R	E	V	I	H	P	L	A	g6572948	

FIGURE 2A



241 R N Q Q S D F Y K I P I E I V N K T L P I V A I T L L S L V 7492448  
 100 T S H Q Q Y F Y K I P I L V I N K V L P M V S I T L L A L V 96572948  
 271 Y L A G L L A A A Y Q L Y Y G T K Y R R F P P W L E T W L Q 7492448  
 130 Y L P G V I A A I V Q L H N G T K Y K K F P H W L D K W M L 96572948  
 301 C R K Q L G L L S F F F A M V H V A Y S L C L P M R R S E R 7492448  
 160 T R K Q F G L L S F F F A V L H A I Y S L S Y P M R R S Y R 96572948  
 331 Y L F L N M A Y Q Q V H A N I E N S W N E E E V W R I E M Y 7492448  
 190 Y K L L N W A Y Q Q V Q Q N K E D A W I E H D V W R M E I Y 96572948  
 361 I S F G I M S L G L L S L L A V T S I P S V S N A L N W R E 7492448  
 220 V S L G I V G L A I L A L L A V T S I P S V S D S L T W R E 96572948  
 391 F S F I Q S T L G Y V A L L I S T F H V L I Y G W K R A F E 7492448  
 250 F H Y I Q S K L G I V S L L G T I H A L I F A W N K W I D 96572948  
 421 E E Y Y R F Y T P P N F V L A L V L P S I V I L G K I I L F 7492448  
 280 I K Q F V W Y T P P T F M I A V F L P I V V L I F K S I L F 96572948

FIGURE 2B

